107. Labrella Ptarmicæ, Desm.! n. 189. Fr. El. 2. p. 149. In the early part of the present year I brought from M. Desmazières' garden at Lambersart, near Lille, a root of the double variety of Achillea Ptarmica, which is there always infested with Labrella Ptarmicæ. When the young shoots appeared a few leaves were attacked, and on examining the parasite I was surprised to find that, contrary to the generic character given by Fries, there are distinct asci and paraphyses. Asci short, obtuse, broad above, attenuated below. Sporidia few, obovate-oblong, sometimes rather contracted in the centre, and there occasionally furnished with a septum. Paraphyses short, flexuous, their tips obtuse or slightly clavate. Perithecium passing beneath the hymenium of a reticulated cellular structure.

PLATE VII. fig. 7. a, a small portion of the hymenium; b, asci, with their sporidia and paraphyses; c, sporidia magnified 600 diameters.

[To be continued.]

XXI.—On a New Species of Epilobium nearly allied to Epilobium angustissimum and rosmarinifolium. By W. H. White.*

In 1830 a collection of seeds was sent from the Botanical Garden of St. Petersburgh, by Dr. Fischer, to the Botanical Garden of Louvain. The greater part of them were from Central Russia. Among the number of packages was one of an *Epilobium*, without any specific name, and with the indication new species.

The following particulars have been transmitted to me by M. Denkalaar, chief gardener at the Botanical Garden, Louvain, relative to the culture of this new species of *Epilobium*; and, as it contains some interesting remarks, I thought I could not make better use of them than by laying them before this Society.

This plant has been cultivated with the greatest care; and from a minute observance of its developments, and researches made into its characters, the cultivators have become convinced that up to the present time, this species has neither been described nor cultivated elsewhere. In order therefore to give a faithful exposition of its characters, and to make it better known to the botanical world, the

^{*} Read before the Botanical Society of London, March 2, 1838, and communicated by the Secretary of that Society.

following specific denomination has been given to it, in accordance with the principles of the angustissimum and rosmarinifolium.

"Our plant has a straight stem, much branched, branches diffused and silky, furnished with leaves alternate, lanceolate, acuminate, and of a silky whiteness. Its flowers, disposed in loose ears, are at considerable distances, solitary, and of a pale rose colour; stigma quadrifid and rather bent; the pod of the same length as the peduncle.

"This description sufficiently indicates that the species in question belongs to a generic group designated by Decandolle, in his Prodrome, by the name of *Chamænerion*, consequently to the same series in which is placed the *Epilobium angustissimum*."—Curtis.

This last species, confounded by all authors with *Epilobium rosmarinifolium*, Haenke, (not Pursch,) until the publication of the Flora of Reichenbach, is in fact very different, as a long series of observations has proved, so that the above-named publication has become comparatively useless by the publication of the Flora Excursoria.

However this may be, I take the liberty of stating that Reichenbach has not shown the essential differences between these two species of plants.

The one, in fact the *Epilobium angustissimum*, so beautifully figured in Curtis's Bot. Mag., Pl. 76, has its ascendant stem diffuse, branched, reddish, as well as its branches; its leaves linear-lanceolate, obtuse, very smooth, marked with glandular serratures; the flowers loose, solitary upon their footstalks, and flesh-coloured; stigma quadrifid and bent; the pod twice as long as the footstalk. It flowers long before the following, and grows spontaneously in Bavaria, Ireland, and Scotland.

The other, the *Epilobium rosmarinifolium*, Haenke, is a plant from Bohemia and the Tyrol, and has, on the contrary, an erect stem, diffuse, very much branched; branches spread; leaves lanceolate and acuminate, nearly entire, very slightly pubescent; a long ear, flowers more compact and of a puce colour; the stigma is of the same length as the footstalk, but the pod is four times that length.

In comparing the characters of the Epilobium angustissimum and rosmarinifolium with those of the Epilobium now described, the result is that the latter ought accordingly to be placed as intermediate between the other two, or at least as allied to both species. I propose to name it canescens, which will give a suitable idea of its habit. In recapitulating the characteristic traits of the three above-

mentioned species, I think their mutual affinities and their diagnostic characters will be fully determined as follows:

- Epilobium canescens, nob. Foliis lanceolatis, acuminatis, integerrimis; ramisque sericeo canescentibus; siliquâ pedunculi longitudine.
- Epilobium angustissimum, Curtis. Foliis lanceolato-linearibus, obtusis, glanduloso-serratis; ramisque glaberrimis, siliquâ pedunculo duplo longiori.
- Epilobium rosmarinifolium, Haenke. Foliis lanceolatis, acuminatis, subintegerrimis, ramisque puberulis; siliquâ pedunculo quadruplo longiori.

I will now beg leave to remark with respect to the *Epilobium angustissimum* of Curt., that that species furnishes a variety with leaves still more narrow and stem feeble, which has been designated by the name of *Epilobium Dodonæi* by Allioni, of *Epilobium Lobelii* by Villars, of *E. Halleri* by Retz; and in later periods by *E. angustissimum*, β alpinum by Sering.

And with respect to the *E. rosmarinifolium*, Haenke, I beg leave to remark that it is a species totally distinct from his homonym, the *E. rosmarinifolium*, Pursch. This last is in fact a North American plant, discovered in 1810 in the environs of Philadelphia, and since by Bigelow, who calls it *E. lineare*; some few years still later in a hundred places south-west of that city, in the territory of Boston. Nuttall has found it, and has given it the name of *E. squammatum*.

XXII.—Floræ Insularum Novæ Zelandiæ Precursor; or a Specimen of the Botany of the Islands of New Zealand. By Allan Cunningham, Esq.

[Continued from p. 378 of vol. ii. of Sir W. J. Hooker's Companion to the Botanical Magazine.]

EXOGENÆ SEU DICOTYLEDONES.

PIPERACEÆ, Rich.

1. PIPER, L.

323. P. excelsum. Forst, Prodr. n. 20. Ræm. & Sch. Syst. Veg. i. p. 313. A. Rich. Fl. Nov. Zel. p. 356.—Kana-Kana of the natives.

New Zealand (Middle Island).—1773, Forster. (Northern Island,) a strong rambling shrub, frequent on the margins of forests.—1834, R. Cunningham.